

**REMARKS:**

Claims 1-5, 7-13, and 15-25 are currently pending in the application.

Claims 27-49 have been canceled without *prejudice*.

Claims 6, 14, 26, and 50-71 have been withdrawn from further consideration.

Claims 1-5, 7-13, and 15-25 stand rejected under 35 U.S.C. § 112, second paragraph.

Claims 1-5, 7-13, and 15-25 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,377,095 to Meada et al. ("*Meada*").

Although the Applicants believe Claims 1-5, 7-13, and 15-25 are directed to patentable subject matter without amendment, the Applicants have amended Claims 1, 4, 7, 9, 12, 15, 17, 20, and 25. By making these amendments, the Applicants make no admission concerning the merits of the Examiner's rejection, and respectfully reserve the right to address any statement or averment of the Examiner not specifically addressed in this response. Particularly, the Applicants reserve the right to pursue broader claims in this Application or through a continuation patent application. No new matter has been added.

**REJECTION UNDER 35 U.S.C. § 112:**

Claims 1-5, 7-13, and 15-25 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Applicants respectfully disagree.

Nonetheless, the Applicants have amended Claims 1, 4, 7, 9, 12, 15, 17, 20, and 25 to expedite prosecution of this Application and to more particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. By making these amendments, the Applicants do not indicate agreement with or acquiescence to the

Examiner's position with respect to the rejections of these claims under 35 U.S.C. § 112, as set forth in the Office Action. Particularly, the Applicants reserve the right to pursue broader claims in this Application or through a continuation patent application. In addition, the Applicants respectfully submit that the amendments to Claims 1-5, 7-13, and 15-25 are not necessitated by any prior art and are unrelated to the patentability of the present invention.

The Applicants respectfully submit that amended Claims 1, 4, 7, 9, 12, 15, 17, 20, and 25 are considered to be in full compliance with the requirements of 35 U.S.C. § 112. The Applicants further respectfully submit that amended Claims 1, 4, 7, 9, 12, 15, 17, 20, and 25 are in condition for allowance.

With respect to dependent Claims 2, 3, 8, 10-13, 16, 18, 19, 21, 22, and 24: Claims 2, 3, and 8 depend from amended independent claim 1; Claims 10-13, and 16 depend from amended independent claim 9; and Claims 18, 19, 21, 22, and 24 depend from amended independent claim 17. As mentioned above, amended independent Claims 1, 9, and 17 are considered to be in full compliance with the requirements of 35 U.S.C. § 112. Thus, dependent Claims 2, 3, 8, 10-13, 16, 18, 19, 21, 22, and 24 are considered to be in condition for allowance for at least the reason of depending from an allowable claim. Thus, the Applicants respectfully request that the rejection of Claims 1-5, 7-13, and 15-25 under 35 U.S.C. § 112 be reconsidered and that claims 1-5, 7-13, and 15-25 be allowed.

#### **REJECTION UNDER 35 U.S.C. § 103(a):**

Claims 1-5, 7-13, and 15-25 stand rejected under 35 U.S.C. § 103(a) over *Meada* in view of the Examiner's Official Notice.

Although the Applicants believe Claims 1-5, 7-13, and 15-25 are directed to patentable subject matter without amendment, the Applicants have amended Claims 1, 4, 7, 9, 12, 15, 17, 20, and 25. By making these amendments, the Applicants do not indicate agreement with or acquiescence to the Examiner's position with respect to the rejections of these claims under 35 U.S.C. § 103(a), as set forth in the Office Action.

The Applicants respectfully submit that *Meada* or the Examiner's Official Notice, either individually or in combination, fail to disclose, teach, or suggest each and every element of Claims 1-5, 7-13, and 15-25. Thus, the Applicants respectfully traverse the Examiner's obvious rejection of Claims 1-5, 7-13, and 15-25 under 35 U.S.C. § 103(a) over the proposed combination of *Meada* or the Examiner's Official Notice, either individually or in combination.

### **The Proposed *Meada*-Official-Notice Fails to Disclose, Teach, or Suggest Various Limitations Recited in Applicants Claims**

For example, with respect to independent Claim 9, this claim recites:

***A system for generating a price schedule for one or more products***, the system comprising:

a ***transition graph generator*** operable to ***generate a transition graph comprising a plurality of paths, each path comprising a plurality of states, each state having*** a price value, an inventory value, and a ***state value***, the transition graph generator operable to generate the transition graph by repeating the following for a plurality of stages until a final stage is reached:

determining the price value of a successor state;

calculating the inventory value of the successor state using the price value and the inventory value of a predecessor state; and

calculating the state value of the successor state using the price value and the inventory value of the predecessor state; and

an ***optimizer*** coupled to the ***transition graph generator*** and operable to:

select a ***path according to the state values*** of the states;

and

determine a ***price schedule from the path***. (Emphasis

Added).

Independent Claims 1, 17, and 25 recite similar limitations. *Meada* or the Examiner's Official Notice fail to disclose each and every limitation of independent Claims 1, 9, 14, and 25.

The Applicants respectfully submit that *Meada* fails to disclose, teach, or suggest independent Claim 9 limitations regarding a ***“system for generating a price schedule for one or more products”*** and in particular *Meada* fails to disclose, teach, or suggest

independent Claim 9 limitations regarding a **“transition graph generator operable to generate a transition graph comprising a plurality of paths, each path comprising a plurality of states, each state having a price value, an inventory value, and a state value”**. Rather *Meada* discloses a “merchandise analysis system for predicting sales figures on the basis of the past actual sales data by item. (Column 1, Lines 8-10). In particular, the Examiner appears to be equating the **“transition graph generator”** recited in independent Claim 9 with the **“sale prediction”** disclosed in *Meada*. (18 December 2006 Office Action, Page 3). However, the **“sale prediction”** disclosed in *Meada* merely provides for “the actual sale by item corresponding to the past price and the selected function”, and **does not include, involve, or even relate to a transition graph or even a plurality of paths, a plurality of states, or even a state value**. (Column 6, Lines 48-58). In contrast, the **“transition graph generator”** recited in independent Claim 9 is operable to **“generate a transition graph comprising a plurality of paths”** wherein **“each path comprising a plurality of states”** and **“each state having a price value, an inventory value, and a state value”**. Thus, the Applicants respectfully submit that the equations forming the foundation of the Examiner’s comparison between *Meada* and independent Claim 9 cannot be made. The Applicants further respectfully submit that these distinctions alone are sufficient to patentably distinguish independent Claim 9 from *Meada*.

### **The Examiner’s Official-Notice is improper under MPEP § 2144.03**

The Applicants respectfully submit that the Applicants are confused as to what the Examiner specifically teaches by the Official Notice or even to the extent in which the Examiner is taking Official Notice. The Applicants respectfully request clarification as to the subject matter for which Official Notice is being taken. ***The Applicants respectfully traverse the Official Notice because the asserted facts***, as best understood by the Applicants, ***are not supported by substantial documentary evidence or even any type of documentary evidence***, but instead appear to be the Examiner’s opinions formulated using the subject Application as a template, which constitutes impermissible use of hindsight. Furthermore, under these circumstances, it is inappropriate for the Examiner to take Official Notice without documentary evidence to support the Examiner’s conclusion.

(See MPEP § 2144.03). ***The Applicants respectfully request the Examiner to produce authority for the Examiners Official Notice.***

Only “in limited circumstances,” is it “appropriate for an examiner to take official notice of facts not in the record or to rely on common knowledge in making a rejection”. (MPEP § 2144.03). “Official notice unsupported by documentary evidence ***should only be taken by the examiner*** where the facts asserted to be well-known, or to be common knowledge in the art are ***capable of instant and unquestionable demonstration as being well-known***.”

With respect to the subject Application, the Examiner’s statement that the “it would be obvious to one of ordinary skill in the art to adapt *Meada* to obtain the instant application in order to achieve greater flexibility in pricing according to the market”, ***is not capable of instant and unquestionable demonstration as being well-known***. (18 December 2006 Office Action, Page 4). As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be ‘***capable of such instant and unquestionable demonstration as to defy the dispute***’ (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 U.S.P.Q. 6 (C.C.P.A. 1961)).” (MPEP § 2144.03(A)). (Emphasis Added).

“It is ***never appropriate to rely solely on “common knowledge” in the art without evidentiary support in the record***, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697. As the court held in *Zurko*, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* at 1385, 59 USPQ2d at 1697. See also *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002).” (MPEP § 2144.03(A)).

“Ordinarily, there must be some form of evidence in the record to support an assertion of common knowledge. See *Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002); *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (holding that ***general conclusions concerning what is “basic knowledge” or “common sense” to one of***

**ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection).** The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. See *Soli*, 317 F.2d at 946, 37 USPQ at 801; *Chevenard*, 139 F.2d at 713, 60 USPQ at 241. The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice and be allowed to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made.” (MPEP § 2144.03(B)). (Emphasis Added).

The Applicants respectfully submit that the Office Action provides no documentary evidence to support the Official Notice taken by the Examiner, yet the asserted facts are not capable of “instant and unquestionable” demonstration as being well-known. The Applicants further submit that the Applicants have adequately traversed the Examiner’s assertion of Official Notice and direct the Examiner’s attention to the pertinent text of the MPEP, which states:

If applicant adequately traverses the examiner’s assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (“[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings” to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). (MPEP § 2144.03(C)).

Thus, if the Examiner continues to maintain the rejection of Claims 1-5, 7-13, and 15-25 based on the Official Notice, the Applicants respectfully request that the Examiner provide documentary evidence as necessitated by MPEP § 2144.03(C). Furthermore, if the Examiner is relying on personal knowledge to support the finding of what is known in the art, the Applicants further request that the Examiner provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding as further necessitated by MPEP § 2144.03(C).

In addition, the Applicants respectfully point the Examiner to the pertinent sections of the MPEP, directly on point to determine whether the next Office Action should be made Final. In particular, the Applicants respectfully direct the Examiner's attention to the pertinent text of the MPEP, which states:

If the examiner adds a reference in the next Office action after applicant's rebuttal, and the newly added reference is added only as directly corresponding evidence to support the prior common knowledge finding, and it does not result in a new issue or constitute a new ground of rejection, the Office action may be made final. If no amendments are made to the claims, the examiner must not rely on any other teachings in the reference if the rejection is made final. If the newly cited reference is added for reasons other than to support the prior common knowledge statement and a new ground of rejection is introduced by the examiner that is not necessitated by applicant's amendment of the claims, the rejection may not be made final. (MPEP § 2144.03(D)).

#### **The Office Action Fails to Properly Establish a *Prima Facie* case of Obvious over the Proposed *Meada*-Official-Notice Combination**

The Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness based on the proposed combination of *Meada* or the Examiner's Official Notice, either individually or in combination. The Office Action has not shown the required teaching, suggestion, or motivation in these references or in knowledge generally available to those of ordinary skill in the art at the time of the invention to combine these references as proposed. The Office Action merely states that "it would be obvious to one of ordinary skill in the art to adapt *Meada* to obtain the instant application in order ***to achieve greater flexibility in pricing according to the market.***" (18 December 2006 Office Action, Page 4). (Emphasis Added). The Applicants respectfully disagree.

The Applicants further respectfully submit that this purported advantage relied on by the Examiner is nowhere disclosed, taught, or suggested in *Meada* or the Examiner's Official Notice, either individually or in combination. In addition, it appears that the Examiner is asserting that the motivation to combine the references as proposed would be "***to achieve greater flexibility in pricing according to the market.***" (18 December 2006

Office Action, Page 4). (Emphasis Added). The Applicants respectfully disagree and further respectfully request clarification as to how the Examiner arrives at this conclusion. For example, how does **“achiev[ing] greater flexibility in pricing according to the market”** provide motivation to “adapt *Meada* to obtain the instant application” and to what extent does the Examiner purport that **“achiev[ing] greater flexibility in pricing according to the market”** actually applies to the subject Application. ***The Applicants respectfully request the Examiner to point to the portions of Meada or the Examiner’s Official Notice which contain the teaching, suggestion, or motivation to combine these references for the Examiner’s stated purported advantage.*** The Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

A recent Federal Circuit case makes it crystal clear that, in an obviousness situation, the ***prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art.*** *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). (Emphasis Added). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35. With respect to the subject Application, the ***Examiner has not adequately supported the selection and combination of Meada or the Examiner’s Official Notice to render obvious the Applicants claimed invention.*** The Examiner’s conclusory statements that “it would be obvious to one of ordinary skill in the art to adapt *Meada* to obtain the instant application in order ***to achieve greater flexibility in pricing according to the market***”, ***does not adequately address the issue of motivation to combine.*** (18 December 2006 Office Action, Page 4). This factual question of motivation is material to patentability, and cannot be resolved on subjective belief and unknown authority. *Id.* It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to “[use] that which the inventor taught against its teacher.” *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). Thus, ***the Office Action fails to provide proper motivation for combining the teachings of Meada or the Examiner’s Official Notice, either individually or in combination.***



## **The Applicants Claims are Patentable over the Proposed *Meada*-Official-Notice Combination**

The Applicants respectfully submit that independent Claims 1, 17, and 25 include limitations similar to those discussed above in connection with independent Claim 9. Thus, independent Claims 1, 9, 17, and 25 are considered patentably distinguishable over *Meada* and the Examiner's Official Notice for at least the reasons discussed above in connection with independent Claim 9.

With respect to dependent Claims 1-5, 7, 8, 10-13, 15, 16, and 18-24: Claims 1-5, 7, and 8 depend from independent Claim 1; Claims 10-13, 15, and 16 depend from independent Claim 9, and Claims 18-24 depend from independent Claim 17. As mentioned above, each of independent Claims 1, 9, 17, and 25 are considered patentably distinguishable over the proposed combination of *Meada* and the Examiner's Official Notice. Thus, dependent Claims 1-5, 7, 8, 10-13, 15, 16, and 18-24 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

For at least the reasons set forth herein, the Applicants respectfully submit that Claims 1-5, 7-13, and 15-25 are not rendered obvious by the proposed combination of *Meada* and the Examiner's Official Notice. The Applicants further respectfully submit that Claims 1-5, 7-13, and 15-25 are in condition for allowance. Thus, the Applicants respectfully request that the rejection of Claims 1-5, 7-13, and 15-25 under 35 U.S.C. § 103(a) be reconsidered and that Claims 1-5, 7-13, and 15-25 be allowed.

## **THE LEGAL STANDARD FOR OBVIOUSNESS REJECTIONS UNDER 35 U.S.C. § 103:**

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, ***there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.*** Second, there must be a reasonable expectation of success. Finally, ***the prior art reference*** (or references when combined) ***must teach or suggest all the claim limitations.*** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be

found in the prior art, **and not based on applicant's disclosure**. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. Moreover, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); M.P.E.P. § 2143.03.

With respect to alleged obviousness, **there must be something in the prior art as a whole to suggest the desirability**, and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. The consistent criterion for determining obviousness is whether the prior art would have suggested to one of ordinary skill in the art that the process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art. Both the suggestion and the expectation of success must be founded in the prior art, not in the Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); *In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988); M.P.E.P. § 2142.

A recent Federal Circuit case makes it clear that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

**CONCLUSION:**

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

Although the Applicants believe no fees are deemed to be necessary; the undersigned hereby authorizes the Commissioner to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777**. If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777**.

**Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.**

Respectfully submitted,

16 March 2007  
Date

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